

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

CONSTRUCTION RESEARCH & TECHNOLOGY GMBH
 Patente, Marken
 Dr.-Albert-Frank-Strasse 32
 D-83308 Trostberg
 GERMANY

NOTIFICATION OF TRANSMITTAL OF
 THE INTERNATIONAL SEARCH REPORT AND
 THE WRITTEN OPINION OF THE INTERNATIONAL
 SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Date of mailing (day/month/year)	18/03/2005
Applicant's or agent's file reference	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/EP2004/013737	International filing date (day/month/year) 03/12/2004

Applicant

CONSTRUCTION RESEARCH & TECHNOLOGY GMBH

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
 1211 Geneva 20, Switzerland, Fascimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
 - ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.


The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until **30 months** from the priority date (in some Offices even later); otherwise, the applicant must, within **20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

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Name and mailing address of the International Searching Authority  European Patent Office, P.B. 5818 Patentlaan 2 NL-2260 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Véronique Baillou
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NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference COZ-0535/PCT	FOR FURTHER ACTION <small>see Form PCT/ISA/220 as well as, where applicable, Item 5 below.</small>	
International application No. PCT/EP2004/013737	International filing date (day/month/year) 03/12/2004	(Earliest) Priority Date (day/month/year) 26/01/2004
Applicant CONSTRUCTION RESEARCH & TECHNOLOGY GMBH		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

SETTABLE MIXTURE CONTAINING LIME, A CEMENTITIOUS COMPOSITION AND A POLYMER

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☒ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/013737

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C04B28/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/28955 A (FOSROC INTERNATIONAL LIMITED; MILLS, PETER, SHELLEY; DEGVILLE, DAVID,) 26 April 2001 (2001-04-26) cited in the application the whole document	1-4,6-10
Y	-----	5
X	WO 98/58886 A (EVERMINE LIMITED; JOUBERT, KENNETH, ALFRED; VAN VUUREN, HENDRIK, JOHAN) 30 December 1998 (1998-12-30) cited in the application the whole document	1-4,6-10
Y	-----	5
	US 4 350 533 A (GALER ET AL) 21 September 1982 (1982-09-21) the whole document -----	
	----- -/--	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

8 March 2005

Date of mailing of the international search report

18/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Gattinger, I

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/013737

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 101 29 151 A1 (HENKEL KGAA) 21 February 2002 (2002-02-21) the whole document -----	1-10
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 09, 30 July 1999 (1999-07-30) & JP 11 100251 A (OOZEKI KAGAKU KOGYO KK), 13 April 1999 (1999-04-13) abstract -----	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/013737

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0128955	A	26-04-2001	AT 255076 T	15-12-2003
			AT 255077 T	15-12-2003
			AU 772351 B2	22-04-2004
			AU 1036401 A	30-04-2001
			AU 772447 B2	29-04-2004
			AU 1151901 A	30-04-2001
			CA 2384798 A1	26-04-2001
			CA 2384853 A1	26-04-2001
			DE 60006852 D1	08-01-2004
			DE 60006853 D1	08-01-2004
			DE 60006853 T2	19-08-2004
			EP 1230190 A1	14-08-2002
			EP 1230191 A1	14-08-2002
			ES 2211638 T3	16-07-2004
			WO 0128955 A1	26-04-2001
			WO 0128956 A1	26-04-2001
			PL 354654 A1	09-02-2004
			PL 354755 A1	23-02-2004
			PT 1230191 T	30-04-2004
			US 2002157576 A1	31-10-2002
			US 2002161071 A1	31-10-2002
			ZA 200201909 A	07-03-2003
			ZA 200201910 A	07-03-2003
WO 9858886	A	30-12-1998	AU 8539998 A	04-01-1999
			BR 9810446 A	19-06-2001
			CA 2241167 A1	20-12-1998
			CN 1261392 A	26-07-2000
			EA 1141 B1	30-10-2000
			WO 9858886 A2	30-12-1998
			EP 1005441 A2	07-06-2000
			PL 337830 A1	11-09-2000
			TR 9903130 T2	21-04-2000
			ZA 9805350 A	20-12-1999
US 4350533	A	21-09-1982	CA 1182481 A1	12-02-1985
			JP 58026055 A	16-02-1983
DE 10129151	A1	21-02-2002	CA 2431562 A1	14-02-2002
			WO 0212412 A2	14-02-2002
			EP 1307521 A2	07-05-2003
			HU 0303715 A2	01-03-2004
			NO 20030615 A	20-03-2003
			PL 359646 A1	23-08-2004
			SK 1712003 A3	01-07-2003
			US 2004068042 A1	08-04-2004
JP 11100251	A	13-04-1999	NONE	

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2004/013737

International filing date (day/month/year)
03.12.2004

Priority date (day/month/year)
26.01.2004

International Patent Classification (IPC) or both national classification and IPC
C04B28/06

Applicant
CONSTRUCTION RESEARCH & TECHNOLOGY GMBH

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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Tel. +49 89 2399 - 0 Tx: 523656 epmu d
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Authorized Officer

Gattinger, I

Telephone No. +49 89 2399-6097



10/584869

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**International application No.
PCT/EP2004/013737

AP20 Rec'd PCT/PTO 29 JUN 2006

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/013737

Box No. V Reasoned statement under Rule 43b/s.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	5
	No: Claims	1-4,6-10
Inventive step (IS)	Yes: Claims	
	No: Claims	5
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

PCT/EP2004/013737

Re Item V**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: WO 01/28955 A (FOSROC INTERNATIONAL LIMITED) 26 April 2001
D2: WO 98/58886 A (EVERMINE LIMITED) 30 December 1998
D3: US-A-4 350 533 (GALER ET AL) 21 September 1982

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1 to 4 and 6 to 10 is not novel in the sense of Article 33(2) PCT.

- 2.1. The document D1 discloses (the references in parentheses applying to this document):

D1 discloses a settable composition based on an aqueous polymer latex or polymer powder and a cementitious composition comprising up to 10 wt.-% lime, 25 to 95 wt.-% calcium aluminate and up to 50 % calcium sulfate (page 2; lines 5 to 20) with ratios of polymer to cementitious composition of 0.5:1 to 10:1 (on solids content). Taking into account the calcium oxide content of the calcium aluminate (page 4; lines 2 to 8; calculation of CaO content analogical to example 3 of the present application) the overall lime content surmounts 13 %. Thus, the subject-matter can not be considered to be novel over D1. As the settable composition is used for coating rock surfaces (page 1; lines 4 to 6) claims 6 to 10 are also not novel.

As the total CaO amount may be over 40 wt.-%, neither claim 3 nor claims 2 and 4 can be regarded novel in light of D1.

- 2.2. The analogous argumentation applies for document D2, which also discloses a settable composition based on an aqueous polymer latex or polymer powder and a

cementitious composition comprising calcium aluminate, calcium sulfate and lime provided by Portland cement. The subject-matter of claim 1 can therefore also not be considered to be novel in view of D2.

3. Dependent claim 5 does not contain any features which, in combination with the features of any claim to which it refer, meet the requirements of the PCT in respect of novelty and/or inventive step, the reasons being as follows:

The document D1, which is regarded as being the closest prior art (see also point 2.1. above), differs from subject-matter of dependent claim 5 in that no stoichiometric surplus of lime is disclosed.

However, it would appear, that the skilled person starting from the teaching of D1 and seeking to further improve the early strength development of the ettringite-binder polymer coating takes account of D3, which mentions this problem and suggests the addition of extraneous lime (column 3; line 50 to column 4; line 24) to solve this problem. Thus, the subject matter of claim 5 results from the combination of D1 and D3 in an obvious manner and is therefore not inventive.

Re Item VIII

Certain observations on the international application

- Page 3 of the present description was submitted with multiple obvious typing errors.

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 11100251
PUBLICATION DATE : 13-04-99

APPLICATION DATE : 29-09-97
APPLICATION NUMBER : 09283018

APPLICANT : OOEKI KAGAKU KOGYO KK;

INVENTOR : TSUDA ISAMU;

INT.CL. : C04B 28/06 C04B 22/06 C04B 24/26 E04G 23/02 E21D 11/10 // C04B103:10

TITLE : QUICK SETTING COMPOSITION FOR CONCRETE

ABSTRACT : PROBLEM TO BE SOLVED: To obtain a quick setting composition capable of being instantaneously exothermically hardened and obtaining initial and long term strength by adding water into a powdery mixture obtained by adding a specific quantity of each lithium hydroxide and quick lime to a cement blended material consisting of calcium aluminate and an inorganic aggregate and kneading them thereby forming the composition.

SOLUTION: This quick setting composition is formed by adding water the powdery mixture obtained by adding 0.2-1.0 wt.% lithium hydroxide and 2-10 wt.% quick lime to the cement blended material consisting of calcium aluminate and the inorganic aggregate, which is used in a ratio of 1:(1-2.5) to calcium aluminate and is at least one or more of silica sand, gravel, a heavy calcium carbonate and the like and kneading them. If necessary, 1-4 wt.% thermoplastic powdery resin, preferably a resin obtained by spray drying an emulsion of one or more copolymers selected from an ethylene-vinyl acetate-, an ethylene- vinyl acetate-vinyl chloride ternary-, an ethylene-vinyl acetate-acrylic ternary-, a vinyl acetate-acrylic-copolymer containing acetate group as a hydrophilic group and the like is added into the powdery mixture.

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